System Specific Coordination

- ADD 2.5.6 for the frequency assignment 2483.5-2500 MHz the pfd produced at the earth's surface by emissions from space stations radiated over the territory of this administration into these frequency assignments does not exceed the following thresholds on a per space station basis:
 - -150 dB(W/m²) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;
 - $-150 + 0.65(\delta-5)$ dB(W/m²) in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;
 - -137 dB(W/m²) in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

These limits relate to the power flux-density which would be obtained under assumed free-space propagation conditions.

- ADD 2.5.7 Except for the band 2483.5-2500 MHz, the frequency assignments referred to in 2.5.4, and 2.5.5 use digital modulation and the Fractional Degradation of Performance (FDP) caused into reference digital FS assignments located in the territory of this administration does not exceed the thresholds in RR 2566 (as modified).
- ADD 2.5.8 The application of the simulation (standard computation method described in Appendix ZZZ to reference FS frequency assignments located in the territory of this administration results in an interference level which does not exceed the limits indicated in [Doc. WP CPM/8].

Coordination with the Fixed Service of an administration is not required:

a) in the band 2483.-5-2500 MHz if the frequency assignments recorded in the Master Register with a favorable finding with respect to **5.15a**, or not notified but in use or planned to be brought into use within the next 3 years, and the pfd produced at the earth's surface by emissions from space stations radiated over the territory of this administration in these frequency

assignments does not exceed the following thresholds on a per space station basis:

In the event the revisions to Resolution 46 are to the concepts of Resolution 46, as contained in the language of the Report of the Voluntary Group of Experts, LQP recommends that the United States propose to insert the following:

- 1. Coordination with the Fixed Service of an administration is not required in the bands 2160-2200 MHz or 2500-2535 MHz if
 - (a) the frequency assignments recorded in the Master
 Register with a favorable finding with respect to 5.15a,
 or not notified but in use or planned to be brought into
 use within the next 3 years, use analogue modulation
 and the pfd radiated over the territory of this
 administration into those frequency assignments does
 not exceed the thresholds in MOD RR 2566, or
 - b) the frequency assignments recorded in the Master
 Register with a favorable finding with repsect to 5.15a,
 or not notified but in use or planned to be brought into
 use within the next 3 years, use digital modulation and
 the Fractional Degradation of Performance (FDP) caused
 into reference digital fixed service assignments located in
 the territory of this administration does not exceed the
 thresholds in MOD RR 2566, and
 - c) the application of the simulation (standard computation method described in ADD Appendix ZZZ) to reference fixed service frequency assignment located in the territory of this administration results in an interference level which does not exceed the limits indicated in [Doc. WP CPM/8].

Coordination with the Fixed Service of an administration is not required in the band 2483.-2500 MHz if the frequency assignments recorded in the Master Register with a favorable finding with respect to 5.15a, or not notified but in use or planned to be brought into use within the next 3 years, and the PFD produced at the earth's surface by emissions from space stations radiated over the territory of this administration in these frequency assignments does not exceed the following thresholds on a per station space basis:

-150 dB(W/m²) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

 $-150 + 0.65(\delta-5)$ dB(W/m²) in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;

-137 dB(W/m²) in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

These limits relate to the power flux-density which would be obtained under assumed free-space propagation conditions.

Either of these approaches would allow the results of the work of Task Group 2/2 to be embodied into the Radio Regulations, thereby reducing time-consuming and unnecessary coordinations, for both NGSO MSS networks as well as fixed service systems.

C. <u>Appropriate PFD Limits Can Be Applied to NGSO MSS Feeder Link</u> <u>Allocations, if Necessary</u>

The Commission, in the <u>Second Notice</u>, discusses the possibility that there may be "a need to include appropriate satellite PFD limits to protect terrestrial networks and GSO FSS space stations operating in the opposite direction of transmission." LQP agrees with the interim report of IWG-3 of the Industry Advisory Committee, that there may be a need to identify appropriate satellite PFD limits to protect terrestrial networks and GSO FSS space stations operating

³⁷ Second Notice, at para. 51.

in the opposite direction of transmission.

With regard to protection of GSO FSS space stations, LQP has proposed, in Annex I to these Comments, language that could be used. The suggested footnote VVV, applicable to the 12.75-13.25 GHz band, is an example of the approach the United States could take if explicit protection limits are sought by other administrations at WRC-95. Concerning appropriate PFD limits to protect terrestrial networks from NGSO MSS feeder links. LQP can support the proposed Article 28 PFD limits contained in the draft CPM Report. These limits are:

```
6-8 GHz: -158/-148 \text{ dB}(\text{W/m}^2/4\text{kHz}) \text{ or } -134/-124 \text{ dB}(\text{W/m}^2/\text{MHz})
13-14 GHz: -150/-140 \text{ dB}(\text{W/m}^2/4\text{kHz}) \text{ or } -126/-116 \text{ dB}(\text{W/m}^2/\text{MHz})
```

The lower values are for arrival angles up to 5 degrees and the higher values for arrival angles up to 90 degrees.

D. The United States Should Ensure that Enhanced Status Is Not Conferred on Secondary Allocations

In adopting the allocation of 1613.8-1626.5 MHz for MSS in the space-to-Earth direction, WARC-92 limited MSS to secondary status. Thus, MSS operations in the space-to-Earth direction are not permitted to cause harmful interference to stations of primary services in the same frequency band and cannot claim protection from harmful interference from stations of a primary service operating in the same frequency band. The Commission, in adopting a band sharing plan for the use of the 1610-1626.5 MHz band for MSS systems operating in the United States, declined to mandate the adoption of a guardband between the CDMA and TDMA/FDMA systems, providing that the parties should "negotiate a suitable guardband agreement." In determining the guardband, the only criteria should be the coordination of CDMA and TDMA uplinks, and the need to protect the primary CDMA uplink from the TDMA secondary downlink.

³⁸ Big LEO Rules Order, at para. 63.

The band sharing plan should not be construed as conferring any rights to the secondary MSS allocation.

As LQP and others proceed to coordinate their MSS systems with other MSS systems as well as terrestrial services, the status of the secondary MSS allocation must be maintained. Thus, LQP urges the Commission to resist efforts, as suggested by text in Document WPCPM95/26-E, 30 January, 1995, that appear to be directed towards changing this status, through procedural approaches.

In particular, LQP is concerned about the identification of bidirectional operations and "coordination regions" in an output document of the recent meeting of the Working Party of the CPM. Subsection G. of Document WPCPM95/26-E, identifies the following areas where work is required:

Review of the Application of Resolution 46

<u>Bidirectional Usage</u>: Coordination between an MSS space station and the MES of another network should be further considered by administrations as to the possibility of any enhanced coordination that may be thought useful.

Regional Coordination Area: For an MSS network subject to Resolution 46, operating in a designated service area, coordination methodology has been suggested in Annex 7 of the Draft CPM Report to calculate the region where co-frequency stations could be affected by the planned network. Procedures need to be developed to be incorporated into Resolution 46.

During preparation for ITU-R Study Group meetings over the past four years, as well as at those meetings, the position of the United States has been that the impact of a secondary service on a primary service should not be considered. Thus, the United States has opposed efforts to develop methods calculating or quantifying such impacts and as a result, no methods of calculating or quantifying such impact have been adopted within the ITU-R.

The above language appears to contradict the United States position. In the first bullet above, the issue of bidirectional usage is addressed, even though this would involve a secondary service. Further, there is no expanation for "enhanced coordination." If LQP is operating mobile earth terminals in one territory, and a

system utilizing a secondary downlink is operating in the adjacent territory, no consideration should be given to the possible impact of LQP's MES uplinks on the downlink operations of the second system. However, it should be clear that the secondary downlink cannot cause harmful interference to LQP's MES uplinks.

With regard to the Regional Coordination Area, LQP is in agreement with Annex 7's purported goal of reducing the number of systems with which a NGSO MSS system would have to coordinate. However, LQP opposes the incorporation of the methodology of Annex 7 into Resolution 46 or other parts of the Radio Regulations, because of the possibility some administrations may be misled into believing that the use of Annex 7 to define a coordination region would confer some status on a secondary allocation. Consequently, if Annex 7 is used at all, its use should be limited to voluntary and mutually-agreed use by administrations engaged in coordination. The possible adoption of the Annex 7 approach as a Recommendation in no way requires that it be incorporated as a required procedure for coordinations involving NGSO MSS systems.

The Commission must take care to avoid adopting or supporting any proposals which may confer additional status on systems operating pursuant to secondary allocations. Such care would be consistent with the position and actions of the United States government since WARC-92. Moreover, allowing one secondary service some form of "enhanced" status could lead to a loss of the distinction generally which would undermine international allocation decisions as well as cause substantial confusion in utilizing the International Table of Allocations.

E. <u>The United States Should Propose Suspension of the Application of RR</u> 2613 in Bands to be Used for NGSO MSS Feeder Links

As discussed above concerning frequency bands to be allocated for use for NGSO MSS feeder links, and addressed in Annex I which contains LQP's specific recommended feeder link proposals, in those bands to be used for NGSO MSS feeder links, a footnote to the allocation should indicate that RR 2613 is inapplicable when the frequency is used for NGSO MSS feeder links. This approach reflects the extensive efforts by the United States, as well as the international community, at TG 4/5 meetings over the past three years, to find an appropriate balance between the needs of the geostationary satellites operating in the fixed-satellite service (FSS) and NGSO MSS feeder links.

The ultimate band recommendations of the MSS proponents of the Industry Advisory Committee IWG-4 reflect this process, which identified bands heavily used by GSO FSS systems, and eliminated them from consideration for NGSO MSS feeder links. This approach will best serve the NGSO MSS community, as well as the United States, in achieving their mutual objectives at WRC-95.

Revision to RR 2613, introduced at this stage of preparations for WRC-95, would confuse and possibly antagonize other administrations which have shown substantial good will and cooperation in enabling the NGSO MSS feeder link proposals to reach their current state. RR 2613, while admittedly difficult to interpret and apply, continues to be of importance, if primarily symbolic, for operators of GSO FSS systems. A proposal to revise RR 2613 would raise the suspicions of administrations already concerned about the impact of NGSO systems throughout the world. Accordingly, LQP urges the Commission to recommend the footnote approach embodied in Annex I to these comments.

V. <u>Date of Availability of 2 GHz MSS Bands</u>

LQP believes that the Commission may need to defer a decision concerning a United States proposal on the advancement of the date of availability of MSS

frequency bands in the 2 GHz range. WARC-92 adopted a date of entry of 1 January 2005 through RR 746B, while RR 746C specifies a date of entry of 1 January 1996 in the United States. In the Second Notice, the Commission states that "consideration of the differing dates of entry into force of 1 GHz MSS allocations should be in the context of an overall approach to making available 2 GHz MSS spectrum, including potential expansion allocations." 39

The Commission recently initiated a proceeding to address the reconfiguration of United States domestic allocations for MSS in the 2 GHz band. 40 The 2 GHz MSS allocations raise many issues which are just beginning to be analyzed and addressed. While LQP believes that substantial additional MSS spectrum will be required to support demand for mobile handheld service, the United States should not at this time finalize a position on the advancement of the date of entry into force for the international allocations, pending further study.

VI. Additional MSS Allocations

The WRC-95 Industry Advisory Committee has amply documented the need for additional allocations for MSS between 1 and 3 GHz.⁴¹ The IAC also has identified a number of frequency bands for consideration as possible United States proposals to WRC-95. The FCC as well, has identified candidate bands for worldwide MSS spectrum allocations.⁴²

LQP supports the inclusion of the bands identified by the Commission in WRC-95 proposals. In particular, the band 1675-1710 MHz would be highly suitable for an MSS allocation in the Earth-to-space direction. The sharing environment -- with Metsat, and MetAids -- would appear to be workable for both

³⁹Second Notice, at para. 67.

⁴⁰ 2 GHz Notice, cited supra.

⁴¹ See MSS Above 1 GHz Spectrum Requirements, IWG-3/11(Rev.4).

⁴² Second Notice, at p. 35, Table 5.

MSS and the existing services.

The United States also should continue its efforts to gain worldwide generic MSS allocations in the 1525-1559/1626.5-1660.5 MHz bands. Generic availability of these bands for domestic and regional MSS systems would reduce demands for bands available for generic MSS on a worldwide basis. While the United States may face opposition to this proposal, ultimately the efforts to obtain worldwide generic MSS allocations are likely to succeed. In view of the convergence of MSS into a single service which can meet land, maritime and aeronautical needs, generic allocations would provide the most flexibility for accommodating multiple systems.

With regard to the 2 GHz bands, the United States will need to propose adjustments, taking into consideration the Commission's decisions to allocate spectrum for PCS.⁴³ The Commission's suggestion, within the 2 GHz proceeding to seek a global allocation, at WRC-95, of 1990-2025 MHz (Earth-to-space) and 2165-2200 MHz (space-to-Earth), is a reasonable one. The United States could also consider proposing deletion of the 20 MHz MSS allocation in the band 1970-1990 MHz.

As for other frequency bands on which the United States may not be able to achieve consensus prior to WRC-95, LQP urges the United States to propose a resolution for adoption at WRC-95, identifying frequency bands for sharing studies to be undertaken prior to WRC-97. An example band is 1492-1525 MHz (space-to-Earth) which is allocated for generic MSS only in Region 2, except in the United States. While this band may not be able to be used in the United States, consideration could be given to expanding the allocation to other regions. Expanding the availability of any frequency band for MSS will serve to accommodate domestic and regional systems, reducing the pressure for those

⁴³ See Memorandum Opinion and Order in the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, 9 FCC Rcd 4055 (1994).

systems to utilize worldwide allocations. Identifying bands in a resolution will enable administrations to consider the suitability of a number of frequency bands for MSS, permit sharing studies to be conducted within the ITU-R, and enhance preparations for WRC-97.

VII. Other Issues

The paramount objectives of the United States for WRC-95 are increasing the usefulness of the 1610-1626.5/2483.5-2500 MHz bands for MSS, and obtaining suitable allocations for NGSO MSS feeder links. However, a primary interest of many administrations will be consideration of the report of the Voluntary Group of Experts (VGE) on revisions to the Radio Regulations. Initial review of the relevant sections of the VGE Report indicates that provisions relating to MSS can be adopted, subject to minor modification.

Concerning preparations for future WRCs, LQP agrees with the preliminary views expressed within the Industry Advisory Committee, that the Commission seek authority to implement a permanent conference preparatory process, with an ongoing public advisory committee. Such a process, with continuing and experienced leadership, will best enable the United States to achieve its objectives within the demanding pace of biannual ITU World Radiocommunication Conferences.

VIII. Conclusion

LQP urges the Commission to adopt the proposals contained in its <u>Second Notice</u>, as revised by these Comments. Such proposals will enable the United States NGSO MSS systems to move forward to implement their systems in a timely and cost-effective manner, to the benefit of the United States economy and consumer, as well as consumers of telecommunications services worldwide.

Respectfully submitted,

LORAL/QUALCOMM PARTNERSHIP, L.P.

John T. Scott, III

William D. Wallace

Crowell & Moring

1001 Pennsylvania Avenue N.W.

Washington, D.C. 20004-2505

(202) 624-2500

Ву:_________

Leslie A. Taylor

Leslie Taylor Associates

6800 Carlynn Court

Bethesda, MD 20817-4302

(301) 229-9341

Its Attorneys

March 6, 1995

ANNEX I NON-GSO MSS Feeder link Allocation Proposals for WRC-95

4800-5725 MHz

MOD

Allocation To Services						
Region 1	Region 2		Region 3			
5000 - 5250	AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE SERVICE (Earth-to-space) 797C					
	733	MOD 796	797	7077		
<u>797D</u>	<u>797E</u>			797B		

NOC 733

The bands 1 610-1 626.5 MHz, 5 000-5 250 MHz and 15.4-15.7 GHz are also allocated to the aeronautical mobile-satellite (R) service on a primary basis. Such use is subject to agreement obtained under the procedure set forth in Article 14.

MOD 796

The band 5030 - 5091 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. The requirements of this system shall take precedence over other uses of this band. Future operations of MLS may extend into the 5000 - 5030 MHz band. Administrations should attempt to satisfy the needs of MLS in the 5030 - 5091 MHz band before expansion into the 5000 - 5030 MHz band. After January 1, 2015, the microwave landing system may also operate in the band 5091 - 5120 MHz, if the requirements of the system in support of precision approach and landing cannot be met in the 5000 - 5030 and 5030 - 5091 MHz bands. In the event that microwave landing system operations extend beyond the 5030 - 5091 MHz band, the requirements of this system shall take precedence over other uses of the occupied bands.

NOC 797

SUP 797A

The bands 5000-5250 MHz and 15.4-15.7 GHz are also allocated to the fixed-satellite service and the intersatellite service, for connection between one or more earth stations at specified fixed points on the Earth and space stations, when these services are used in conjuntion with the aeronautical radionavigation and/or aeronautical mobile(R) service. Such use shall be subject to agreement obtained under the procedure set forth in Article 14.

NOC 797B

ADD 797C

The use of the band 5000 - 5250 MHz (Earth-to-space) and 15.4 - 15.7 GHz (Earth-to-space) (space-to-Earth) by the fixed-satellite service is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service. The provisions of No. 2613 do not apply to these fixed-satellite service allocations.

ADD 797D

The use of the bands 5000 - 5250 MHz (Earth-to-space) and 15.4-15.7 GHz (Earth-to-space) (space-to-Earth) by the fixed-satellite service is subject to the application of the coordination and notification procedures set forth in Resolution 46 [suitably modified], for coordination between non-geostationary satellite networks (Earth-to-space) and between non-geostationary satellite networks (Earth-to-space) and terrestrial services.

ADD 792E

Stations of non-geostationary fixed-satellite service networks (space-to-Earth) brought into use in the band 5000-5250 MHz after November xx, 1995 shall not claim protection from and shall not cause harmful interference to stations in the fixed-satellite service (Earth-to-space).

Reason:

To allocate spectrum specifically for feeder links to support mobile-satellite services provided from non-geostationary satellite networks. Suppression of No. 797A is consequential. Modification of No. 796 incorporates the alternative MLS expansion plan discussed internationally and articulates the transition plan with initial expansion (subject to need) into the 5000 - 5030 MHz band and subsequent expansion (subject to need) into the 5091 - 5120 MHz band. Nos. 797C and 797C add additional requirements when the bands are used by NGSO MSS feeder links, and indicate that RR 2613 does not apply in such cases.

5925-7075 MHz

	Allocation to Services		
Region 1	Region 2	Region 3	
5925 - 7075	FIXED FIXED-SATELLITE (Earth-to-space) 792A MOBILE		
	791 809 <u>792B 792C ZZZ</u>		

NOC 791

The standard frequency and time signal-satellite service may be authorized to use the frequency 4 202 MHz for space-to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of ± 2 MHz of these frequencies and shall be subject to agreement obtained under the procedure set forth in Article 14.

NOC 792A

The use of the bands 4500-4800 MHz, 6725-7025 MHz, 10.7-10.95 GHz, 11.2-11.45 GHz and 12.75-13.25 GHz by the fixed-satellite service shall be in accordance with the provisions Appendix 30B.

ADD 792B

The bands 6650-6725 MHz, 6725-7025 MHz and 7025-7075 MHz are also allocated on a primary basis to the fixed-satellite service (space-to-Earth). Such use by the fixed-satellite service (space-to-Earth) is limited to non-GSO mobile-satellite service feeder links and is subject to the application of the coordination and notification procedures set forth in Resolution 46. The provisions of RR 2613 do not apply to the use by the fixed-satellite service (space-to-Earth).

ADD 792C

Stations of non-GSO fixed-satellite service networks (Earth-to-space) brought into use in the band 6875-7075 MHz after November xx, 1995 shall not claim protection from and shall not cause harmful interference to stations in the fixed-satellite service (space-to-Earth).

NOC 806

The band 5725-5875 MHz (centre frequency 5800 MHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of No.1815.

ADD ZZZ

Coordination areas for receiving earth stations shall be determined using the methodology in the latest version of ITU-R Recommendation 848 in order to effect coordination of frequency assignments with those of transmitting earth stations, when appropriate. (alternative: revise Res. 46)

10.7-11.7 GHz

Allocation to Services					
Region 1		Region 2	Region 3		
10.7 - 11.7		10.7 - 11.7			
FIXED FIXED-SATELLITE (space-to-Earth) 8 (Earth-to-space) 792A 835 MOBILE except aeronautical mobile	335 <u>A</u> <u>WWW</u>	FIXED FIXED-SATELLITE (space-to-Earth) 792A MOBILE except aeronautical mobile 835A WWW			

NOC 792A

The use of the bands 4500-4800 MHz, 6725-7025 MHz, 10.7-10.95 GHz, 11.2-11.45 GHz and 12.75-13.25 GHz by the fixed-satellite service shall be in accordance with the provisions Appendix 30B.

MOD 835

In Region 1, the use of the band 10.7-11.7 GHz may also be used on a primary basis by the fixed-satellite service (Earth-to-space) is limited to for feeder links for the broadcasting-satellite service.

ADD 835A

The bands 10.7-10.95 GHz and 11.2-11.45 GHz are also allocated on a primary basis to the fixed-Satellite Service (FSS) (Earth-to-space). Except as provided in **RR 835**, such use by the FSS (Earth-to-space) is limited to non-geostationary mobile-satellite service feeder links and is subject to the application of the coordination and notification procedures set forth in Resolution 46. The provisions of RR 2613 do not apply to the use by the FSS (Earth-to-space).

ADD WWW

Coordination areas for transmitting earth stations shall be determined using the methodology in the latest version of ITU-R Recommendation 848 in order to effect coordination of frequency assignments with those of potentially affected receiving earth stations, when necessary. Administrations operating stations in the fixed-satellite service (Earth-to-space) are urged to facilitate frequency sharing with Fixed-satellite (space-to-Earth) networks.

Note: as an alternative to WWW, revisions may be made to Res. 46.

12.75-13.25 GHz

Allocation to Services				
Region 1	Region 2	Region 3		
12.75 - 13.25	FIXED FIXED-SATELLITE (Earth-to-space) FIXED-SATELLITE (space-to-Earth) MOBILE Space Research (deep space) DDD VVV ZZ			

NOC 792A

The use of the bands 4500-4800 MHz, 6725-7025 MHz, 10.7-10.95 GHz, 11.2-11.45 GHz and 12.75-13.25 GHz by the fixed-satellite service shall be in accordance with the provisions Appendix **30B**.

ADD DDD

The use of the band 12.75-13.25 GHz by the fixed-satellite service (space-to-Earth) is limited to non-GSO mobile-satellite service feeder links and is subject to the application of the coordination and notification procedures set forth in Resolution 46. The provisions of RR 2613 do not apply to the use by the fixed-satellite service (space-to-Earth).

ADD VVV

The power flux-density produced at and within $\pm 5^{\circ}$ of the geostationary satellite orbit by a non-GSO space station operating in the mobile-satellite service shall not exceed -168 dBW/m²/4 kHz.

15.4-15.7 GHz

Allocation to Services				
Region 1	Region 2	Region 3		
AERONAUTICAL RADIONAVIGATION				
FIXED SATELLITE SERVICE (Earth-to-Space) 797C 797D 733 797				

ADD 797C

The use of the band 5000 - 5250 MHz (Earth-to-space) and 15.4 - 15.7 GHz (Earth-to-space) (space-to-Earth) by the fixed-satellite service is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service. The provisions of No. 2613 do not apply to these fixed-satellite allocations.

ADD 797D

The use of the bands 5000 - 5250 MHz (Earth-to-space) and 15.4-15.7 GHz (Earth-to-space) (space-to-Earth) by the fixed-satellite service is subject to the application of the coordination and notification procedures set forth in Resolution 46 [suitably modified], for coordination between non-geostationary satellite networks (Earth-to-space) and between non-geostationary satellite networks (Earth-to-space) and terrestrial services.

NOC 733

The bands 1 610-1 626.5 MHz, 5 000-5 250 MHz and 15.4-15.7 GHz are also allocated to the aeronautical mobile-satellite (R) service on a primary basis. Such use is subject to agreement obtained under the procedure set forth in Article 14.

NOC 797

The bands 5 000-5 250 MHz and 15.4-15.7 GHz are also allocated to the fixed-satellite service and the inter-satellite service, for connection between one or more earth stations at specified fixed points on the Earth and space stations, when these services are used in conjunction with the aeronautical radionavigation and/or aeronautical mobile (R) service. Such use shall be subject to agreement obtained under the procedure set forth in Article 14.

CERTIFICATE OF SERVICE

I, Andrew F. Taylor, hereby certify that on this 6th day of March, 1995, copies of the foregoing "Comments of Loral/QUALCOMM Partnership, L.P." were mailed, postage prepaid, to the following:

Lon C. Levin Vice President American Mobile Satellite Corp. 10802 Parkridge Blvd. Reston, VA 22091

Bruce D. Jacobs, Esq. Glenn S. Richards, Esq. Fisher, Wayland, Cooper & Leader 1255 23rd Street N.W. Suite 800 Washington, D.C. 20037

Victor J. Toth, P.C. Law Offices 2719 Soapstone Drive Reston, VA 22091

Raul R. Rodriguez
Stephen D. Baruch
David S. Keir
Leventhal, Senter & Lerman
2000 K Street N.W.
Suite 600
Washington, D.C. 20006-1809

Philip L. Malet Steptoe & Johnson 1330 Connecticut Ave. N.W. Washington, D.C. 20036

Henry L. Baumann, Esq. Valerie Schulte, Esq. National Association of Broadcasters 1771 N Street N.W. Washington, D.C. 20036 Robert A. Mazer Nixon, Hargrave, Devans & Doyle One Thomas Circle, N.W. Suite 800 Washington, D.C. 20005

Jill Abeshouse Stern, Esq. Shaw, Pittman, Potts & Trowbridge 2300 N Street N.W. Second Floor Washington, D.C. 20037

Cheryl Lynn Schneider COMSAT 6560 Rock Spring Drive Bethesda, MD 20817

James G. Ennis IRIDIUM, Inc. 1401 H Street, N.W. Washington, D.C. 20005

Richard E. Wiley Carl R. Frank, Esq. Wiley, Rein & Fielding 1776 K Street N.W. Washington, D.C. 20006

Robert A. Mansbach COMSAT World Systems 6560 Rock Spring Drive Bethesda, MD 20817 John L. Bartlett Wiley, Rein & Fielding 1776 K Street, N.W. Washington, D.C. 20006

John Joseph McVeigh Howard C. Griboff Fisher, Wayland, Cooper and Leader 1255 23rd Street, N.W. Suite 800 Washington, D.C. 20037-1170

Stephen L. Goodman Halprin, Temple & Goodman Suite 650 East Tower 1100 New York Ave. N.W. Washington, D.C. 20005

Jonathan D. Blake Covington & Burling 1201 Pennsylvania Ave., N.W. P.O. Box 7566 Washington, D.C. 20044

Mark W. Johnson CBS, Inc. 1634 I Street, N.W. Washington, D.C. 20006

Howard Monderer National Broadcasting Company, Inc. 1229 Pennsylvania Ave., N.W. 11th Floor Washington, D.C. 20004

Thomas J. Keller Verner, Liipfert, Bernhard, McPherson & Hand, Chartered 901 15th Street, N.W. Suite 700 Washington, D.C. 20005 Donald M. Jansky Jansky/Barmat Telecommunications 1899 L Street N.W. Suite 1010 Washington, D.C. 20036

Christopher D. Imlay Booth, Freret & Imlay 1233 20th Street, N.W. Suite 204 Washington, D.C. 20036

Julian L. Shepard Association for Maximum Service Television, Inc. 1776 Mass. Ave. N.W. Suite 300 Washington, D.C. 20036

Sam Antar Capital Cities/ABC Inc. 77 West 66th Street 16th Floor New York, NY 10023

Molly Pauker Fox, Inc. & Fox Television Stations, Inc. 5151 Wisconsin Ave., N.W. Washington, D.C. 20016

J. Laurent Scharff Reed Smith Shaw & McClay 1200 18th Street, N.W. Washington, D.C. 20036

Nancy J. Thompson General Attorney COMSAT Mobile Communications 22300 COMSAT Drive Clarkburg, MD 20871 Philip V. Otero Alexander P. Humphrey GE American Communications, Inc. 1299 Pennsylvania Ave., N.W. Washington, D.C. 20004

Tom W. Davidson, P.C. Akin, Gump, Strauss, Hauer & Field 1333 New Hamshire Avenue, N.W. Suite 400 Washington, D.C. 20036

Ted Pierson, Jr.
Pierson & Tuttle
1200 19th Street, N.W.
Suite 607
Washington, D.C. 20036

Gary M. Epstein John P. Janka Mary E. Britton Latham & Watkins 1001 Pennsylvania Ave., N.W. Washington, D.C. 20004

Leonard Raish Fletcher, Heald & Hildreth 11th Floor 1300 North 17th Street Rosslyn, VA 22209

Andrew F. Taylor March 6, 1995